



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL MODIFICATION
PUTNAM COUNTY**

CERTIFIED MAIL

Street Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov.
Center

Application No: 03-10957

DATE: 2/15/2001

Pro Tec Coating Company
Rick Rupert
5000 County Road #5
Leipsic, OH 458569234

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA

NWDO



**Permit To Install
Terms and Conditions**

**Issue Date: 2/15/2001
Effective Date: 2/15/2001**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 03-10957

Application Number: 03-10957
APS Premise Number: 0369000025
Permit Fee: **\$1000**
Name of Facility: Pro Tec Coating Company
Person to Contact: Rick Rupert
Address: 5000 County Road #5
Leipsic, OH 458569234

Location of proposed air contaminant source(s) [emissions unit(s)]:
**5000 County Road #5
Leipsic, Ohio**

Description of proposed emissions unit(s):
Administrative modification of PTI 03-10957 issued on July 22, 1998 for emissions units P010 (natural gas fired continuous annealing furnace) and B043 and B044 (natural gas fired hot water boilers).

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous

calendar quarters. See B.11 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition

declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are

required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Source Operation and Operating Permit Requirements After Completion of Construction

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

B. State Only Enforceable Permit To Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

4. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

5. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

6. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

7. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

8. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

9. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

10. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. Permit To Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)
 TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
NO _x	39.72
CO	7.6
PM/PM ₁₀	4.9
VOC	1.88
Ammonia	3.99

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
20.9 mm Btu/hr natural gas-fired boiler, with low NOx burners	OAC rule 3745-17-07 (A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10 (B)	0.020 lb PE/mmBtu of actual heat input
	OAC rule 3745-31-05 (PTI 03-0957)	0.04 lb PE/hr 0.18 ton PE/yr
		0.033 lb NOx/mmBtu (see A.I.2.a)
		0.69 lb NOx/hr 3.02 tons NOx/yr
		0.23 lb CO/hr 1.01 tons CO/yr
		0.11 lb VOC/hr 0.48 ton VOC/yr
		See A.I.2.b.
	40 CFR Part 60, subpart Dc	See A.II.1.

2. Additional Terms and Conditions

- 2.a** The permittee shall operate and maintain natural gas-fired low-NOx burners to achieve, on a continuous basis, an emission rate not to exceed 0.033 lb NOx/mmBtu of actual heat input for this emissions unit.
- 2.b** The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B) and 3745-17-07(A).

II. Operational Restrictions

The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Recordkeeping Requirements

For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 3 months after issuance of the permit, unless emission testing demonstrating compliance with the Consent Decree has already been completed, in which case initial emission testing is not required. Emission testing shall also be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NOx and CO.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
 - i. NOx - Method 7 of 40 CFR Part 60, Appendix A; and
 - ii. CO - Method 10 of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

3. Compliance Methods Requirements: Compliance with the emission limitation(s) in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following method(s):
 - a. Emission Limitation:
Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:
OAC rule 3745-17-03(B)(1)
 - b. Emission Limitation:
0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method:

Emissions Unit ID: B043

The permittee shall determine compliance with the lb PE/mmBtu limitation above by multiplying an emission factor (from AP-42, Fifth Edition, Table 1.4-2 (revised 7/98)) of 1.9 lbs PE (filterable)/mm cu. ft of natural gas by the emissions unit's maximum hourly fuel consumption rate (mmcu ft./hr), and then dividing by the emissions unit's maximum heat input capacity (mmBtu/hr).

If required, the permittee shall demonstrate compliance with the particulate emission limitation above in accordance with the procedures and methods specified in OAC 3745-17-03(B)(9).

- c. Emission Limitations:
0.04 lb PE/hr and 0.18 TPY

Applicable Compliance Method:

The permittee shall determine compliance with the hourly limitation above by multiplying an emission factor (from AP-42, Fifth Edition, Table 1.4-2 (revised 7/98)) of 1.9 lbs PE (filterable)/mmcu. ft of natural gas by the emissions unit's maximum hourly fuel consumption rate (mmcu ft./hr).

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly PE limitation in accordance with the procedures and methods specified in Methods 1 - 5 of 40 CFR Part 60, Appendix A.

- d. Emission Limitations:
0.69 lb NO_x/hr and 3.02 TPY

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 7.

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

- e. Emission Limitations:
0.23 lb CO/hr and 1.01 TPY

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 10.

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

- f. Emission Limitation:
0.033 lb NO_x/mmBtu

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 7.

- g. Emission Limitations:
0.11 lb VOC/hr and 0.48 TPY

Applicable Compliance Method:

The permittee shall determine compliance with the hourly limitation above by multiplying an emission factor (from AP-42, Fifth Edition, Table 1.4-2 (revised 7/98)) of 5.5 lbs VOC/mm³ of natural gas by the emissions unit's maximum hourly fuel consumption rate (mm³ ft./hr).

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, compliance with the hourly limitation shall be determined using the test methods and procedures described in Method 18, Method 25, or Method 25A of 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
20.9 mm Btu/hr natural gas-fired boiler, with low NOx burners	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
20.9 mm Btu/hr natural gas-fired boiler, with low NOx burners	OAC rule 3745-31-05 (A)(3)	0.04 lb PE/hr 0.18 ton PE/yr 0.033 lb NOx/mmBtu (see A.I.2.a) 0.69 lb NOx/hr 3.02 tons NOx/yr 0.23 lb CO/hr 1.01 tons CO/yr 0.11 lb VOC/hr 0.48 ton VOC/yr
	OAC rule 3745-17-07 (A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10 (B)	0.020 lb PE/mmBtu of actual heat input
	40 CFR Part 60, subpart Dc	Exempt, see A.II.1.

2. Additional Terms and Conditions

- 2.a The permittee shall operate and maintain natural gas-fired low-NOx burners to achieve, on a continuous basis, an emission rate not to exceed 0.033 lb NOx/mmBtu of actual heat input for this emissions unit.
- 2.b The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B) and 3745-17-07(A).
- 2.c Since natural gas is the only fuel fired in this emissions unit, no SO₂ emission limitation is established by OAC Chapter 3745-18 for this emissions unit.

II. Operational Restrictions

- 1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Recordkeeping Requirements

- 1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

- 1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

- 1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 3 months after issuance of the permit, unless emission testing demonstrating compliance with the Consent Decree has already been completed, in which case initial emission testing is not required. Emission testing shall also be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NO_x and CO.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
 - i. NO_x - Method 7 of 40 CFR Part 60, Appendix A; and

- ii. CO - Method 10 of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

3. Compliance Methods Requirements: Compliance with the emission limitation(s) in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following method(s):

- a. Emission Limitation:
Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:
OAC rule 3745-17-03(B)(1)

- b. Emission Limitation:
0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method:
The permittee shall determine compliance with the lb PE/mmBtu limitation above by

multiplying an emission factor (from AP-42, Fifth Edition, Table 1.4-2 (revised 7/98)) of 1.9 lbs PE (filterable)/mm cu. ft of natural gas by the emissions unit's maximum hourly fuel consumption rate (mmcu ft./hr), and then dividing by the emissions unit's maximum heat input capacity (mmBtu/hr).

If required, the permittee shall demonstrate compliance with the particulate emission limitation above in accordance with the procedures and methods specified in OAC 3745-17-03(B)(9).

- c. Emission Limitations:
0.04 lb PE/hr and 0.18 TPY

Applicable Compliance Method:

The permittee shall determine compliance with the hourly limitation above by multiplying an emission factor (from AP-42, Fifth Edition, Table 1.4-2 (revised 7/98)) of 1.9 lbs PE (filterable)/mmcu. ft of natural gas by the emissions unit's maximum hourly fuel consumption rate (mmcu ft./hr).

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly PE limitation in accordance with the procedures and methods specified in Methods 1 - 5 of 40 CFR Part 60, Appendix A.

- d. Emission Limitations:
0.69 lb NO_x/hr and 3.02 TPY

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 7.

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

- e. Emission Limitations:
0.23 lb CO/hr and 1.01 TPY

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 10.

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

- f. Emission Limitation:
0.033 lb NOx/mmBtu

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 7.

- g. Emission Limitations:
0.11 lb VOC/hr and 0.48 TPY

Applicable Compliance Method:

The permittee shall determine compliance with the hourly limitation above by multiplying an emission factor (from AP-42, Fifth Edition, Table 1.4-2 (revised 7/98)) of 5.5 lbs VOC/mmcu. ft of natural gas by the emissions unit's maximum hourly fuel consumption rate (mmc u. ft./hr).

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, compliance with the hourly limitation shall be determined using the test methods and procedures described in Method 18, Method 25, or Method 25A of 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
20.9 mm Btu/hr natural gas-fired boiler, with low NOx burners	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

Pro Tc
PTI Aj
Issued: 2/15/2001
None

Emissions Unit ID: B044

Pro Tc

PTI Aj

Emissions Unit ID: P010

Issued: 2/15/2001

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P010 - 76.8 MMBtu/hr natural gas fired annealing furnace with 5 1.0 MMBtu/hr auxiliary natural gas burners (modification of PTI 03-10957 issued on 7/22/98). Mod involves decreasing the temp requirement of the selective catalyst reduction control device.	OAC rule 3745-31-05 (A)(3)	0.06 lb nitrogen oxides (NOx)/mmBtu (see A.I.2.c) 4.61 lbs NOx/hr (see A.I.2.a) 20.18 tons NOx/yr 4.45 lbs carbon monoxide (CO)/hr and 19.49 tons CO/yr 0.21 lb volatile organic compounds (VOC)/hr and 0.9 ton VOC/yr 1.03 lbs particulate emissions (PE)/hr and 4.5 tons PE/yr 3.99 tons ammonia/yr See A.II.3.
	OAC rule 3745-17-07(A)	See A.I 2.b.
	OAC rule 3745-17-11(B)(2)	See A.I 2.b.

2. Additional Terms and Conditions

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- 2.a** The permittee shall employ the Bloom Model 2320-063 recuperative radiant tube furnace burners with all "air staged air nozzles," and two NOx OUT SCR systems for NOx emissions reduction. The air staged nozzle design along with the two NOx OUT SCR systems shall limit NOx emissions to 0.06 pound NOx/mmBtu of actual heat input, based on a 3-hour rolling average, when this emissions unit is in operation (including lance pilot). "In operation" shall mean that the main burners are firing and the product is moving through the continuous annealing furnace. "In operation" shall not include low fuel flow/low temperature furnace conditions, such as idle and furnace temperature ramp-up and ramp-down. During times that the furnace is not "in operation" and the main burners are idling or only the pilot burners are operating, the 4.61* lbs/hr NOx limit shall be met at all times.

* The 4.61 pounds NOx per hour limitation shall be based on a 3-hour rolling average.

- 2.b** This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- 2.c** The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply since the facility is located in Putnam County, which is identified as a P-2 county.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.
2. The maximum heat input (including the lance pilot) shall not exceed 76.8 mm Btu per hour.
3. The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be lower than 50 degrees below the average SCR temperature recorded during the most recent compliance test.
4. The permittee shall continuously maintain the urea/gas ratio, when the emissions unit is in operation, at a value that is within +/- 10 percent of the average value established during the most recent emission testing that demonstrated that the emissions unit was in compliance.

III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall operate and maintain equipment necessary to continuously monitor the following parameters for the SCR NOx control unit while this emissions unit is in operation. The

monitoring and recording devices shall be capable of accurately measuring the desired parameters. The monitoring and recording devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee:

- a. the urea flow rate, in gallons per hour;
 - b. the natural gas flow rate, in standard cubic feet per hour;
 - c. the SCR inlet temperature, in degrees Fahrenheit;
 - d. the NOx emission rate at the outlet of the SCR unit, in pounds per hour;
 - e. the number of hours the SCR unit was in operation; and
 - f. the number of hours this emissions unit was in operation.
3. The permittee shall collect and record the following information each month for this emissions unit:
- a. the total urea usage, in gallons;
 - b. the total natural gas usage, in standard cubic feet;
 - c. the daily urea to natural gas flow ratio (3.a/3.b), in gallons of urea per each standard cubic feet of natural gas;
 - d. the monthly average Btu content of fuel (Btu per standard cubic foot) as specified by the natural gas supplier;
 - e. the heat input rate (b x d), in mmBtu;
 - f. the number of hours and specific hours the emissions unit was "in operation;"
 - g. the number of hours and specific hours the emissions unit was not "in operation;"
 - h. the average hourly heat input rate for this emissions unit (e/f), in mmBtu/hr;
 - i. the number of hours the SCR system associated with this emissions unit was in operation;
 - j. the total number of three-hour average periods during which the temperature was

monitored at the inlet of the SCR unit;

- k. For any 3-hour block of time when the emissions unit is in operation, shall not be lower than 50 degrees below the average SCR temperature recorded during the most recent compliance test.
 - l. all 3-hour periods during which the NOx emission rate was monitored at the outlet of the SCR unit;
 - m. all 3-hour periods during which the average NOx emission rate was greater than 4.61 pounds NOx per hour; and
 - n. all 3-hour periods during which the average NOx emission rate was greater that 0.06 pound NOx per mmBtu.
4. The urea/gas ratio shall be determined and adjusted on a continuous basis by a primary control circuit based on natural gas flow rate, which shall determine the appropriate urea flow rate to each SCR unit. Additionally, a secondary control circuit shall be utilized consisting of two NOx monitors which shall increase or decrease the urea flow rate according to NOx concentrations observed at the discharge of each SCR unit. The purpose of the secondary control circuit is to optimize the efficiency of each SCR control system and minimize ammonia slip to the atmosphere.
5. A statement of certification of the existing continuous NOx monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 6 and/or 40 CFR Part 75. Proof of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.
6. The permittee shall operate and maintain existing equipment to continuously monitor and record NOx from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75.
- The permittee shall maintain records of all data obtained by the continuous NOx monitoring system including, but not limited to, parts per million NOx on an instantaneous (one-minute) basis, emissions of NOx in units of the applicable standard in the appropriate averaging period (i.e., pounds/hour and pounds/mmBtu for each rolling 3-hour period), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.
7. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 60, Appendix F and/or 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on site and available for inspection during regular office

hours.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the following:
 - a. the NO_x emission rate of 4.61 lbs/hr;
 - b. the NO_x emission rate of 0.06 lb/mmBtu; and
 - c. the 3-hour average SCR inlet temperature required by A.II.3.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all days during which the urea/gas ratio was not within +/- 10 percent of the average value measured during the most recent emission testing that demonstrated that the emissions unit was in compliance.
4. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NO_x values in excess of the applicable limits specified in 40 CFR Part 76 or any limitations specified in the terms and conditions of this permit. These reports shall also contain the total NO_x emissions for the calendar quarter (in tons).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous NO_x monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the

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date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission report pursuant to 40 CFR Part 60.7. The summary shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 3 months after issuance of the permit, unless emission testing demonstrating compliance with the consent decree has already been completed, in which case initial emission testing is not required. Emission testing shall also be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NOx and CO.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
 - i. NOx - Method 7 of 40 CFR Part 60, Appendix A; and
 - ii. CO - Method 10 of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

3. During the emission testing, the permittee shall also record the following parameters for each run:
 - a. the hourly average urea flow rate, in gallons/hr (average);
 - b. the hourly average natural gas flow rate, in standard cubic feet/hr (average); and
 - c. the urea/natural gas ratio (i/ii).

4. Compliance Methods Requirements: Compliance with the emission limitation(s) in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following method(s):
 - a. Emission Limitation:
Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:
OAC rule 3745-17-03(B)(1)

 - b. Emission Limitation:
0.06 lb NOx/mmBtu

Applicable Compliance Method:
The permittee shall demonstrate compliance with the emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 7.

 - c. Emission Limitation:
4.61 lbs NOx/hr and 20.18 tons/yr

Applicable Compliance Method:
The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60,

Appendix A, Method 7.

Also, the permittee shall demonstrate compliance with the hourly limitation above based on the record keeping requirements specified in section A.III.2 of this permit.

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

- d. Emission Limitation:
1.03 lb PE/hr and 4.5 ton/yr

Applicable Compliance Method:

The permittee shall determine compliance with the hourly limitation above by multiplying an emission factor (from AP-42, Fifth Edition, Table 1.4-2 (revised 7/98)) of 1.9 lbs PE (filterable)/mm cu. ft of natural gas by the emissions unit's maximum hourly fuel consumption rate (mmcu ft./hr).

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, the permittee shall demonstrate compliance with the hourly particulate emission limitation in accordance with the procedures and methods specified in Methods 1 - 5 of 40 CFR Part 60, Appendix A.

- e. Emission Limitation:
4.45 lbs CO/hr and 19.49 tons/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation above based upon the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 10.

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

- f. Emission Limitation:
0.21 lb VOC/hr and 0.9 ton/yr

Applicable Compliance Method:

The permittee shall determine compliance with the hourly limitation above by multiplying an emission factor (from AP-42, Fifth Edition, Table 1.4-2 (revised 7/98)) of 5.5 lbs VOC/mmcu. ft of natural gas by the emissions unit's maximum hourly fuel consumption rate (mmcu ft./hr).

The annual emission limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

If required, compliance with the hourly limitation shall be determined using the test methods and procedures described in Method 18, Method 25, or Method 25A of 40 CFR Part 60, Appendix A.

- g. Emission Limitation:
3.99 tons ammonia/yr

The permittee shall determine compliance with the limitation above as follows:

$$\text{ammonia emissions (tons/year)} = \text{FGR} \times (0.0442^*/1000000) \times (8760 / 2000)**$$

where:

FGR = total flue gas flow rate, in dscfh

SLP = maximum ammonia slip (12.5 ppmv)

* conversion factor from grams/liter to lbs/cubic foot

** conversion factor (to convert from lbs/hr to tons/year)

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P010 - 76.8 MMBtu/hr natural gas fired annealing furnace with 5 1.0 MMBtu/hr auxiliary natural gas burners (modification of PTI 03-10957 issued on 7/22/98). Mod involves decreasing the temp requirement of the selective catalyst reduction control device.		See B.III.1. below

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level

concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Ammonia

TLV (mg/m³): 17,000

Maximum Hourly Emission Rate (lbs/hr): 0.91

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 0.4172

MAGLC (ug/m³): 404.8

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not

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be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None